

# **INDIANA LIFE SCIENCES ACADEMY**

**LEARNING IS FOR EVERYONE**



## **CHARTER SCHOOL APPLICATION PROSPECTUS**

**Submitted to The Honorable Bart Peterson**

**Mayor of Indianapolis**

**May 1, 2002**

## Executive Summary

We would like to quote excerpts from the foreword of The Report to the Nation from the National Commission on Mathematics and Science Teaching for the 21<sup>st</sup> Century by John Glenn, Commission Chairman:

“First, at the daybreak of this new century and millennium, the Commission is convinced that the future well-being of our nation and people depends not just on how well we educate our children generally, but on how well we educate them in mathematics and science specifically. It is abundantly clear from the evidence already at hand that we are not doing the job that we should do—or can do—in teaching our children to understand and use ideas from these fields. Our children are falling behind; they are simply not “world-class learners” when it comes to mathematics and science.”

The Third International Mathematics and Science Study (TIMSS) tested the students of 41 nations. Children in the United States were among the leaders in the fourth-grade assessment, but by high school graduation they were almost last. Here at home, the National Assessment of Educational Progress basically substantiates our students’ poor performance.

As a response to the above report and similar other observations, the founding Board of Indiana Life Sciences Academy (ILSA) has the vision to initiate a college preparatory middle and high school with a rigorous and innovative educational program focusing on *science, mathematics* and *technology*. The Indiana Life Sciences Academy will concentrate on urban secondary education where the need for improvement is greatest.

The Indiana Life Sciences Academy is to be a small and structured school in central Indianapolis with maximum of 350 students attending at full enrollment in grades 6-12. We will provide urban young students with an educational program that will, first and foremost, help transform their lives and get them excited about science and technology. Recognizing that educational success will be achieved when the essential underlying triad of student-parent-teacher is in harmony, ILSA will strive to create a partnership among this triad that will provide our youth with the support and tools necessary. Intending to achieve a 100% college acceptance rate, ILSA will be a pioneer high school that will provide the United States of America with its emerging leaders and entrepreneurs in science, medicine, technology, related industry and other socially meaningful callings.

ILSA students will prepare science projects, participate in national and international science contests and organize local science fairs and have internships in cooperation with local universities and corporations to get highly qualified for colleges with scholarships.

***The mission of the Indiana Life Sciences Academy is to provide an environment of learning and continuous growth with rigorous college preparatory science, mathematics, and technology program and to create an atmosphere for students, parents, and teachers to reach their highest potential.***

The life sciences are perhaps the most dynamic and powerful force in this new century, bringing technological and other outcomes that are continuously proving to be very beneficial to humanity. Technological advances and results of research in life sciences such as biochemistry,

biotechnology, genetics, medical devices, botany, cell biology, ecology, food and nutrition, public health, and agriculture are both amazing and accelerating. Indianapolis and central Indiana are on the cutting edge of all of these developments. The moral imperative is to ensure that the very future of Indianapolis—its youngest citizens—have the opportunity to explore and achieve in the life sciences during their formative years, especially those children from ethnic and socioeconomic groups which are historically under-represented in the life and other sciences. All ILSA students will develop a solid comprehension of advanced science, math and technology. We believe that the emerging **Central Indiana Life Sciences Initiative** should be put into practice in middle and high school education.

The Indiana Life Sciences Academy is based on a model, which has already proven itself in similar urban settings. We will incorporate the **Science Academy Project** model, which is an Ohio based nonprofit organization with a proven success on science education in inner city charter school settings. As part of this project, the Horizon Science Academies were established as charter schools in 1999 in Cleveland and Columbus, Ohio. The Horizon Science Academy (HSA) schools proved their success with the increasing passing rates in Ohio Proficiency Exam and awards in science project contests and fairs. In their second educational year, HSA students participated in Northeastern Ohio Science Engineering Fair with two life sciences (genetics) projects, that won jury special awards along with invitation to the 2002 Intel Science and Engineering Fair. In their third educational year, HSA students participated the same fair with 19 projects and won 4 silver, 10 bronze medals, and 5 honorable mansions as an only charter school participating among some 63 schools (with 484 students).

The ever-growing waiting list for HSA starting with the first year was in harmony with the high student retention rate. HSA Cleveland currently has a student population of 360 with 150 in the waiting list for all different grade levels. HSA Columbus currently has a student population of 200 with 80 in the waiting list.

HSA was also a popular choice for students and families because of the international field trips organized and lead by experienced teachers. We believe that successful international field trips will provide students with multicultural experience, which is a must for the modern world and can be utilized in students' future activities.

Since there is a shortage of highly qualified science and mathematics teachers in America (and, as the *Indianapolis Star* recently wrote, in Indiana), some of these teachers at HSA were recruited from abroad through a teachers exchange program. Such talented teachers using the same exchange program will also be recruited for ILSA from abroad to bring up the next generation of teachers in the long run.

ILSA will support the students' scientific endeavors to their fullest capacity using all sources in the community such as local universities, government and private research institutions, pharmaceutical and biotechnology companies. We will provide increasing number of talented young individuals to the health and life sciences industry.

ILSA will partner with **SchoolStart**, which is a Minnesota based nonprofit organization with experience helping to launch successful charter schools. SchoolStart Indiana will assist ILSA by giving advice in the areas of finance, fundraising, governance, staff development, accountability, board training, and other key issues, with the aim of building our own capacity for long-term success. SchoolStart Indiana's role will be purely advisory.

Recent reports on the performance of IPS students in SAT and ISTEP demonstrate a need for innovative educational approaches to improve our students' performance in this area as compared to state and national averages. ILSA's goal is to exceed the district's SAT averages considerably and achieve 100% college acceptance rates and 100% ISTEP passing rates. We will set up a committee consisting of Board members, teachers, and parents to guide, to oversee and to enforce the achievements towards these goals.

We recently conducted an informal survey in Indianapolis by contacting people in their homes and offices. Among 43 people we contacted so far, 41 of them were all very enthusiastic to hear about our initiative and stated that they want to see such a school to come to life in Indianapolis.

With increasing number of students enrolled in private or home schools, we are convinced that the type of public school option Indiana Life Sciences Academy will not only bring many of these families back to public education, but will keep others from leaving public education in Indianapolis metropolitan area. ILSA will:

- Treat all students as gifted and talented
- Provide intense, individualized instruction in life sciences, math, technology and reading
- Engage students through home visits, tutorials and peer study groups individualized instruction
- Offer intensive after school program, including science competition study groups, extra curricular activities (which will focus on academics as well as social and art related activities), tutoring, and parent classes
- Give students stronger critical thinking and reasoning capabilities (scientific rationale)
- Invite scientists, who are vanguards in their own fields, from local universities and life sciences companies to give motivational speeches
- Extend the reach of life sciences initiative to middle school and high school students, who will be motivated to pursue success in their post-secondary and graduate studies
- Cooperate with the life sciences initiative program to have opportunities for internships, projects, and to participate in local, national, and international science fairs and competitions
- Serve students as a college preparatory school and make sure that ALL students will go to college without remediation
- Promote life sciences education in greater Indianapolis metropolitan area
- Collaborate with local universities, community agencies and educational institutions to share resources and build community assets
- Empower all stakeholders: students, teachers, families, and community members to participate in the development (e.g. curriculum) of the school

The Board of Directors brings extensive experience working in science academy school settings, and personal and professional networks with access to human and financial resources in the greater Indianapolis metropolitan area. Members of our Board of Directors are among the most qualified individuals that can take our students in the direction of our scientific horizon.

# TABLE OF CONTENTS

<b>TABLE OF CONTENTS.....</b>	<b>I</b>
<b>OUR VISION.....</b>	<b>1</b>
MISSION.....	1
NEED .....	1
GOALS .....	2
<i>Academic Performance</i> .....	3
<i>Organizational Viability</i> .....	3
<i>School-Specific Objectives</i> .....	3
<b>FOUNDING GROUP .....</b>	<b>4</b>
MEMBER ROLES .....	4
<b>EDUCATIONAL SERVICES PROVIDED.....</b>	<b>5</b>
EDUCATIONAL PHILOSOPHY .....	5
Education for Future Success.....	5
Excellence and Equity in Education.....	6
Choice in Education .....	6
Testimonials from people involved in HSA (model of which ILSA will follow).....	6
CURRICULUM .....	7
<i>Pre-Algebra</i> .....	8
ASSESSMENT .....	9
<i>Assessment Of School Outcome Goals</i> .....	11
<i>Student Performance Objectives:</i> .....	11
<i>Family Involvement</i> .....	12
SPECIAL STUDENT POPULATIONS .....	14
<b>ORGANIZATIONAL VIABILITY AND EFFECTIVENESS .....</b>	<b>15</b>
BUDGET AND FINANCIAL MATTERS.....	15
BUDGET NARRATIVE.....	17
GOVERNANCE AND MANAGEMENT.....	19
<i>Board of Directors</i> .....	19
<i>The Sub Committees</i> .....	21
TRANSPORTATION .....	22
<b>APPENDIX.....</b>	<b>23</b>

## Our Vision

Indiana Life Sciences Academy (ILSA) is a college preparatory middle and high school with a rigorous and innovative educational program focusing on *science (especially life sciences)*, *mathematics* and *technology*. Indiana Life Sciences Academy is to be a small and structured school in Indianapolis with maximum of 350 students attending at full enrollment in grades 6-12. At ILSA, students will prepare life sciences projects, participate in national and international science contests and organize local science fairs in cooperation with local universities and corporations.

## Mission

The mission of the Indiana Life Sciences Academy is to provide an environment of learning and continuous growth with rigorous college preparatory science, mathematics and technology curricula, and to create an atmosphere for students, parents, and teachers to reach their highest potential –intellectually, socially, emotionally and physically.

## Need

Former Senator John Glenn, Chairman of the National Commission on Mathematics and Science Teaching for the 21<sup>st</sup> Century said in the foreword of The Report to the Nation:

“First, at the daybreak of this new century and millennium, the Commission is convinced that the future well-being of our nation and people depends not just on how well we educate our children generally, but on how well we educate them in mathematics and science specifically. It is abundantly clear from the evidence already at hand that we are not doing the job that we should do—or can do—in teaching our children to understand and use ideas from these fields. Our children are falling behind; they are simply not “world-class learners” when it comes to mathematics and science.”

The Third International Mathematics and Science Study (TIMSS) tested the students of 41 nations. Children in the United States were among the leaders in the fourth-grade assessment, but by high school graduation they were almost last. Here at home, the National Assessment of Educational Progress basically substantiates our students’ poor performance.

Recent reports on the performance of Indianapolis public schools .IPS students in math demonstrate a need for innovative educational approaches to improve our students’ performance in this area as compared to state and national averages. Reports indicate that approximately two third of IPS’s 6<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> graders failed the math portion of the ISTEP between 1998 and 2002 as summarized in the following table (source: Indiana Department of Education).

Percent passing ISTEP+ Math Standard						
	Indianapolis Public Schools			Indiana Average		
Year	Grade 6	Grade 8	Grade 10	Grade 6	Grade 8	Grade 10
1998-99	27%	27%	29%	60%	64%	60%
1999-00	33%	32%	31%	62%	64%	65%
2000-01	30%	30%	35%	64%	65%	68%
2001-02	29%	34%	31%	62%	67%	66%

It is important to note that IPS’ SAT scores are low, despite a very low participation rate. In other words, SAT-takers in IPS consist of the district’s top students, yet scores remain low. ILSA’s goal is to exceed

the district's averages and participation rate considerably. Following table summarizes the SAT participation rates and scores for IPS by years compared to state and national averages.

<b>SAT Scores College Bound Seniors</b>										
	<b>Indianapolis Public Schools</b>				<b>Indiana Average</b>			<b>United States Average</b>		
<b>Year</b>	<b>Pct of 12<sup>th</sup> Graders Tested</b>	<b>Verbal</b>	<b>Math</b>	<b>Total</b>	<b>Verbal</b>	<b>Math</b>	<b>Total</b>	<b>Verbal</b>	<b>Math</b>	<b>Total</b>
1988-89		366	404	770	412	459	871	427	476	903
1989-90				867	408	459	867	424	476	900
1990-91		351	388	739	408	457	865	422	474	896
1991-92		366	399	764	409	459	868	423	476	899
1992-93		372	406	778	409	460	869	424	478	902
1993-94		364	401	764	410	466	876	423	479	902
1994-95	31%	366	401	767	415	467	882	428	482	910
1995-96	35%	443	423	866	494	494	988	505	508	1013
1996-97	32%	444	434	878	494	497	991	505	511	1016
1997-98	34%	452	428	880	497	500	997	505	512	1017
1998-99	33%	443	428	871	496	498	994	505	511	1016
1999-00	26%	453	446	899	498	501	999	505	514	1019
2000-01	24%	455	451	906	499	501	1000	506	514	1020

Scoring Scale was changed in 1995-96

College acceptance rate is reported as 54% based on the self-reporting of high school juniors and seniors. We are also committed to increase this rate substantially by encouraging students in every way and working together with parents.

With increasing number of students enrolled in private or home schools, the type of public school option Indiana Life Sciences Academy will provide will not only bring many of these families back to public education, but will keep others from leaving public education in Indianapolis metropolitan area.

We conducted a survey to have feedback from our community. So far, 43 people participated in our survey and they were all content for such a scientific school education. They all expressed their consent for our emphasis on life sciences and technology for innovation. Copy of the survey can be found in Appendix 7. We also put posters and flyers in the Public Libraries in the Metropolitan Indianapolis. Flyer and poster samples can be found in Appendix 8 and 9, respectively.

Finally, we believe that *Central Indiana Life Sciences Initiative* should be put into practice in middle and high school education. ILSA will form the foundations of this Initiative in education. ILSA will offer its students enough preparation (in technology) towards the needs this Initiative put forward.

## Goals

The ILSA believes that each child has an inherent curiosity and love of learning; and that each child has a unique intelligence, level of capability, and learning style. ILSA has the responsibility to construct a program, which engages and motivates students to invest their talents, energy, and enthusiasm in completing their schoolwork in an exemplary manner.

Summary of few most important goals and associated measures in relation to the academic performance, organizational viability and school-specific objectives is given below:

### **Academic Performance**

The Charter School's Board of Directors expects that all students in the school will achieve these minimum academic goals:

- 100% or greater pass rate on 6<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> grade Indiana State-Wide Test of Educational Progress (ISTEP).
- 5.5 or above in reading and math in the Iowa Test of Basic Skills.
- 97% or greater attendance rate
- 97% or greater graduation rate
- Meet all learning standards
- Achieve mastery level on a standardized test administered at the school
- 100 % of students been with us with 4 years at least will be ready for college without remediation
- Students will master algebra by 8<sup>th</sup> grade

### **Organizational Viability**

The Board of Directors will develop an accountability plan that will focus on, but not be limited to:

- Faculty retention rate at 80% by third year
- At least 100 students in the waiting list for the first year and at least 200 in the second year
- Parental satisfaction as measured by re-enrollment and participation in their child's education.
- Parent meetings in order to establish and come to consensus on parents' expectations for student achievement.
- New and additional parent activities to be added each year, based on the interests of parents.
- Attain a 3.0 composite rating or better (on a scale of 1.0 to 4.0) from a minimum of 75% of all parents on a parent satisfaction survey.
- The re-enrollment rate at the school to be approximately 90% of all students who have not relocated outside of Indianapolis.
- Every student's parent or guardian will attend at least one conference each year. Data will be recorded by teachers and will be included in our annual report.

Each year the Board of Directors will include the results of the parent survey and the summary of student achievement in the annual report.

### **School-Specific Objectives**

- 90% or more satisfaction in the annual teacher, parent and student satisfaction survey
- Form a replicable model of how to teach science for all other schools in urban areas by the end of third year
- Dissemination of best practices on math and science to other schools



- Positive feedback from the community, students and parents regarding the ability of incorporating an integrated curricula of math, science (e.g. biochemistry, nutrition and food, and agriculture), and technology

## Founding Group

Current members of the founding group of the Indiana Life Sciences Academy are Bulent Bayraktar, Vedat Akgun, Ph.D., Jennifer L. Gerst, Gregory G. Taylor, Mary Clark, Ann M. Lorenz, Travis Ryan, Kevin Miller, and Ali Korkmaz. Dr. Akgun was a co-founder and the treasurer of two charter schools in Ohio (Horizon Science Academies). Mrs. Gerst has a B.S. degree in biology and pursuing her Ph.D. (close to completion) in the same field. She will bring her experience in teaching and her vision in life sciences (especially genetics) research to our school. Mr. Taylor is an attorney. Mrs. Clark is a branch manager in National City Bank. Mrs. Lorenz is an accountant with thirty years of experience. Mr. Miller has extensive experience in not-for-profit organizations. Mr. Korkmaz focused on educational innovations as part of his research at the School of Education, Indiana University. Mr. Bayraktar has experience in both academic and industrial aspects of biomedical engineering. The school is in process of reaching out to more professionals to join the board. The school will be adding at least two more professionals from the biotech industry to join the founding group as early as next week and then submit their information to the Mayor's office. There may be additional board members from the parents and from the school's management in the future.

Detailed leadership information and background check authorizations are give in Appendix 1 and 2, respectively.

## Member Roles

**Bulent Bayraktar** is the president of the board and will participate in every step of the preauthorization and post authorization processes. He has Bachelor of Science and Master of Science degrees from the Electrical Engineering and Applied Physics of Case Western Reserve University and he is very close to earning his Ph.D. degree in Electrical Engineering (with emphasis on Biomedical Engineering). He has a very strong background in science and technology. He also has a lot of experience in teaching and tutoring. He will help the school in science curriculum, community relations, and personnel.

**Vedat Akgun** has a Ph.D. in Industrial Engineering with specialization in Operations Research. He works as a Senior Systems Analyst for Menlo Worldwide Technologies building optimization decision support systems. He has a very strong engineering and technical background, and has a very good understanding of how a challenging science, math and technology education should be. He has a strong work discipline, organized study and excellent communication skills. He has a personal interest in charter schools and has wide range of knowledge in the concept. Vedat Akgun has been a founder board member/treasurer of the Horizon Science Academies of Cleveland and Columbus. The Horizon Science Academies proved themselves in the Cleveland and Columbus School System and have been increasingly popular for those students and parents looking for a choice in education. In their second educational year, Horizon Science Academies students participated in Northeastern Ohio Science Engineering Fair with two life sciences (genetics) projects. These two projects won jury special awards along with some cash prizes at an international environmental science fair and they were also invited to the 2002 Intel Science and Engineering Fair which will be held in Louisville, KY in May 2002. In their third educational year, HSA students were also participants in 2002 Northeastern Ohio Science Engineering Fair but this time the number of participating projects went up to 19. It is worth noting that all of the 19 projects were ranked highly in their own category including 4 silver, 10 bronze medals, and 5 honorable mansions. Even more striking is the fact that HSA (with its 19 students) was the only charter school participated in this science fair among some 63 schools (with 484 students) in northeastern Ohio.

Dr. Akgun wants to bring his experience in building a very successful charter school in Indianapolis with Indiana Life Sciences Academy. He also brings to the founding group his experiences as an instructor, teaching assistant and tutor during his education. He will chair the finance subcommittee.

**Jennifer L. Gerst** has a B.S. degree from Case Western Reserve University in the field of biology. She is currently pursuing her Ph.D. in the same field at Northwestern University and she is close to completion of her degree. She is looking forward to joining Indianapolis community for her post-doctoral studies at Indiana University Purdue University in Indianapolis (IUPUI) in December 2002. She has been involved in teaching different courses in her field and also in research projects related to different aspects of genetics and developmental biology. She will serve as the chairperson of the *Science Projects Committee* and will be responsible for guiding and directing all efforts for science projects.

**Gregory G. Taylor** will help the school with legal issues and he is very active in community projects.

**Ann M. Lorenz** will oversee the financial matters of the school.

**Mary Clark** will help the school with her banking experience.

**Travis Ryan** has a degree in Computer Technology and learned all the components of a computer system such as networks, database, and programming. He has experience in troubleshooting the problems in the computer systems and business processes of small and large companies. His technical background would assist the Indiana Life Sciences Academy in achieving the level of excellent education. His professional business background would allow him to make well-informed business decisions as a founding member of ILSA. He will help the school with computer technology (e.g. computer labs) and facilities and equipment.

**Kevin Miller** He brings his experiences as a teacher and tutor from his past work with the US Peace Corps and various nonprofit organizations in the Seattle, Washington area. He will be responsible for community relations. He comes into this founding group with extensive experience and training in working with nonprofit organizations. He is currently a Master of Public Affairs Candidate with the School of Public and Environmental Affairs at Indiana University, Bloomington, Indiana, where his focus of study is nonprofit management.

**Ali Korkmaz** has extensive practical and research experience in education. He has been working as a teacher, guiding pre-service teachers in their teaching and observing them as a researcher. He has been working on his Ph.D. in Instructional Systems Technology, Indiana University- Bloomington, where his focus area is how to integrate technology in K-12 settings. He has initiated and participated in several projects where he saw lots of achievements in students, teachers, parents and the community. He will help the school with its academic policies and curriculum.

## **Educational Services Provided**

### **Educational Philosophy**

The immediate goal of ILSA is to prepare students for academic success in their college education, to enable students to keep open a broad spectrum of options for their future endeavors, and to prepare them to be responsible and productive citizens.

We believe that an educated citizen in the 21<sup>st</sup> century must have the skills and understanding to participate and work productively in a multicultural, globally-oriented environment, including the skills required to use technology to its full potential.

### **Education for Future Success**

The school will focus on core knowledge and essential skills so that students may achieve the mastery upon which further learning will build. The ILSA education program also includes comprehensive health

and physical education. The core ILSA grade-level outcomes meet Indiana's core curriculum standards and are defined in part by referring to existing national and international standards.

In the course of their studies, students in ILSA are expected to develop and sharpen the skills necessary to formulate a question or to define an issue. They will learn to find relevant information using appropriate tools and to evaluate it through critical thinking and quantitative analysis, based on which they will solve problems and make decisions. And they will be able to organize and present their work both orally and in written or graphic form.

ILSA will strive to lead every student to these accomplishments, which are essential to future success in school and at work, to the responsibilities of citizenship, and to the satisfactions of a cultivated mind.

### **Excellence and Equity in Education**

Interest in rigorous early education crosses all demographic boundaries. ILSA will seek a diverse student body and offer those students both excellence and equity in education. The school's strong academic program will reduce achievement gaps by eliminating an important cause – the insufficient mastery of basic knowledge and skills required for further academic achievement. ILSA will use a variety of teaching methods to ensure mastery of appropriate skills, ideas, and knowledge for all students, regardless of race, gender, or the family's socioeconomic background.

ILSA will be responsible for meeting the educational needs of its students without parents resorting to outside tutoring provided parents/guardians support the school's mission by ensuring home study sessions and homework completion. Beyond its core program, ILSA is dedicated to challenging and stimulating every child.

### **Choice in Education**

ILSA's third main goal is to provide a real choice among education opportunities for students, parents, and teachers. The availability of choice is an important element in educational accountability that promotes higher standards throughout the system. Those students whose families prefer a rigorous early education may choose ILSA, while remaining are free to return to the regular public schools in the school corporation of their residence if they become dissatisfied. This mechanism puts emphasis on the needs of the students, and helps to ensure that these needs are met in either regular public schools or ILSA. The accountability that choice encourages will also help maintain strong public support for public education as a whole.

By meeting its objectives, ILSA will provide children with a positive educational and social experience in a structured, challenging, yet nurturing environment. It will be a community in which students, teachers, and parents are jointly aware of and committed to the mission and goals of the school.

### **Testimonials from people involved in HSA (model of which ILSA will follow)**

Horizon Science Academies received many appreciation messages from the parents, students, staff and visitors. Mr. James D. Clary, Jr., who is the Assistant Dean of Students, quoted "Arriving HSA after 34 years teaching and administration experience with the Cleveland School system, I will say that this school is great with many interesting and meaningful activities for the students. The staff and faculty work as a team and reach out to the community. I am very pleased with the program and direction of Horizon Science Academy."

A parent wrote "Many thanks to Horizon Science Academy for touching our lives along with the dedicated education provided for our kids" and another parent praised the school by writing "Program offers our children an exceptional learning environment". A student in the Columbus school wrote, "The school is a very nice school and has very nice people and teachers. The school is very nice and successful and I wish it to continue."

After being a judge in the science fair at the school, Dr. Martha K. Cathcart from the Lerner Research Institute at the Cleveland Clinic Foundation wrote “I thoroughly enjoyed my time at Horizon. Your students should be proud. Almost all of them seemed to take ownership in their school. This is critical for doing a good job. Their enthusiasm was wonderful. If there is anything I can do to promote your programs let me know.”

Additional testimonials can be found in Appendix 10.

## **Curriculum**

The Indiana Life Sciences Academy will have an accelerated college preparatory curriculum. The curriculum from the Science Academy Project is being adopted by considering the Indiana Academic Standards.

The curriculum includes grouping and sequencing specific standards to allow teaching those skills concurrently while providing students with in-depth experiences to promote conceptual mastery of each discrete standard. To demonstrate mastery, students will be required to apply skills in completing specific tasks to ensure learning is deeper than is required by traditional recall assessments. The curriculum will include recommended performance assessments to be used throughout the instruction in the following ways: 1) pre-assessments to be used as both a diagnostic tool, and as a baseline measure of student performance; 2) on-going assessments that teachers will use throughout the instruction to gain information about student learning (what students have or have not grasped) in order to adjust instruction accordingly and to allow differentiation and/or individualization of instruction tailored to specific student strengths and weaknesses; and 3) post assessments to indicate that students have met each standard.

The curriculum guides also include recommended instructional activities and resources, such as sections of specific textbooks, periodicals, on-line, electronic or other resources. The curriculum guides will provide a strong foundation for the classroom curriculum, which will be collaboratively refined by the classroom teachers in the spring and summer prior to the school’s opening. The teacher input into the finalization of the curriculum encourages cross curriculum instruction (paired teaching across two or more subject areas). The curriculum will be designed to allow teacher flexibility in instructional methods to allow teachers – during instruction -- to capitalize on student interests and strengths as a means for creating meaningful and effective instruction in areas in which students are struggling.

The classroom instructional approach involves the teachers acting as researchers while teaching. Ongoing assessments will give an indication as to what students are learning, where they are struggling and why. This information will be used and compared to the analysis of what students need to be able to do in order to meet specific learning standards. Teachers will use multiple teaching methods – to ensure student acquisition of. For example some students respond well to following math formulae; others need to develop spatial and fractional logic in order to understand why the formulae work before they can internalize and apply that learning to more advanced applications.

Instructional units, covering sets of learning standards, will be organized around ‘real world’ issues or applications or will provide experiential learning activities to build concrete understandings upon which more abstract concepts and skills can be built. These approaches increase the relevancy of classroom learning and promote the acquisition of higher level, critical thinking skills within and across the disciplines. The service learning and enrichment learning activities will be structured to relate to classroom instruction to encourage student application of knowledge in differing settings.

One example to demonstrate how the school’s educational philosophy and mission play out in the classroom is given below.

## Pre-Algebra

The eighth grade Pre-Algebra program represents an extension of the work most of the students did in the seventh grade. The pedagogy and instruction are basically the same. The students will learn the material by analyzing and studying statements, illustrations, and example. Topics in eighth grade Mathematics support the topics covered in the eighth grade science class. The scope and sequence of the eighth grade program are as follows:

- Review of pre-algebra concepts,
- Solving a full range of first degree and literal equations,
- Operations with polynomials,
- Factoring polynomials,
- Inequalities,
- Analytic geometry,
- A study of simultaneous equations,
- A study of functions,
- Rational expressions,
- Quadratic equations

Performance objectives are

- Use patterns and keys on the calculator to extend the concept of inverse operations.
- Use invented and conventional symbols to explain a function relation.
- Explore the right triangle relations, sine, cosine, and tangent.
- Explore and describe in words simple and complex patterns in the environment.
- Select appropriate notation and methods for symbolizing the problem statement and the solution process.
- Extend the application of previously learned strategies to a wide variety of problems.
- Use elementary notions of probability.
- Explore the role of sampling and collecting data in making a statistical argument.

The nature of the ILSA curricular approach allows teacher flexibility to individualize student assignments regarding specific student needs and current student performance in relation to specific standards. This approach includes the use of Individual Education Plans (IEPs) for all students. This flexibility allows student work to be adapted to meet special needs and language needs. The ‘double dose’ individualized instruction time builds students skills in reading and math and may incorporate regular classroom work into the individualized studies in order to provide students with additional assistance in course work. In addition weekly collaboration and in-class assistance by the Special Education specialist and the English as a Second Language (ESL) teacher will build classroom teachers’ capacity to meet each student’s academic needs.

Start-up grant funds will be sought to pay teachers for up to one month prior to the opening of the school so that they can work collaboratively in refining the curriculum and assessment tools. On-going professional development and collaborative planning time will be used throughout the academic year to continue developing and refining curriculum materials. In addition, weekly professional development

activities will focus on building teachers' repertoire of instructional activities that can be incorporated into classroom instruction.

Students who are performing above grade level may take the individualized courses in order to further build their skills, or may take individualized accelerated courses. The instructional methods used with the curriculum will promote critical thinking, applied knowledge and authentic instruction as is consistent with the Science Academy Project Model. To ensure that all graduates are prepared for college level work, the high school course offerings at ILSA follows the Indiana Core 40. Primary courses are listed below for the high school as an example. Full course offerings will follow the Core 40 course.

<b>COURSE</b>	<b>GRADE</b>	<b>COURSE</b>	<b>GRADE</b>
Algebra I	9	Choir	9-11
Basic Eng.	9	Ecology	9-11
English	9	Environmental Process	9-11
General Biology	9	Geometry I	9-11
Modern World History	9	Geometry II	9-11
Algebra II	10	History Of Africa	9-11
American Literature I	10	History Of Music	9-11
Early American History	10	Inter. Conflict& Media	9-11
General Chemistry	10	Intermed. Spanish	9-11
Algebra II	11	Intro. To Art	9-11
American Literature II	11	Organic Chemistry	9-11
General Physics	11	PE&Health	9-11
Late Ame. Hist.+ Ame. Gov.	11	Physics	9-11
PreCalculus	11	Poetry&Writing	9-11
Analytics of Line and Circle	9-11	Psychology I	9-11
Band	9-11	SAT Prep Verbal	9-11
Beg. Spanish	9-11	SAT Prep Math	9-11
C++OOD	9-11	Speech & Communication	9-11
Cell Biology	9-11	Zoology	9-11

## Assessment

The principles of ILSA's management model provide a framework for analyzing and evaluating student performance. Rather than serving solely as a means to judge an end product, assessment of student performance will be an integral component of the learning process. Students will come to an understanding of assessment as a part of the process of continuous improvement.

Individual learning plans are the mechanism for implementing the core of the mission of ILSA. Each student at the school will be given ample opportunity to reach their highest potential on a daily basis. Completing an examination or a term paper is not the focal point of the student's day. Teaching, learning, and assessing will be implemented in a manner that instills in students the belief that learning is continuous, that errors or mistakes are not red marks on a paper signifying failure, but are check-in points to show the way toward continuous improvement. At ILSA, failure is viewed as a natural part of life's learning processes, an inherent characteristic of constant growth and development. Each student will be challenged to reach to and then beyond what they believe themselves capable.

Performance tasks will be created to provide explicit information about students' ability to achieve selected content standards and life-long learning standards. Student performance will be evaluated through reference to scoring rubrics, which describe levels of performance. The performance tasks will be created by teachers and students within the following parameters: the task requires students to

communicate results clearly, to collaborate with the teachers and students, as well as to work on their own; the task requires sufficient mastery of principles so that students are able to appropriately bring them to bear on large, multifaceted problems of real-life; and the tasks require students to construct new knowledge.

Students learn through the construction and completion of tasks as well as through utilizing rubrics designed for student self-assessment. Presentations and demonstrations by individuals and groups will be featured during scheduled parent/community visits. These presentations will reflect the varied modes of learning and expression of students. Self-assessment will also be conducted through the use of journal writing in response to probes of understanding (a question asked by the teacher to elicit assessment information for specific standards).

The pupil outcome goals will be part of a comprehensive evaluation plan utilizing traditional standardized tests, essays, surveys, oral presentations, community feedback, portfolios and exhibitions, and newly created performance indexes. Our assessment methods are based on the following beliefs:

1. In order to have a complete picture of a student's growth, different types of assessments must be used. Assessments for individual students should focus on a student's growth towards proficiency standard rather than comparing a student's performance against other students.
2. There should be a close relationship between a desired student outcome and means used to assess it.
3. Assessing what students do with knowledge is as important as assessing what knowledge they have.
4. Assessment should promote and support reflection and self-evaluation on the part of students, staff and parents.

Following table lists the assessment by subject levels.

SUBJECT MATTER	ASSESSMENT
English Literature	Varied writing assignments, portfolios, exhibitions, proficiency and standardized tests.
Social Sciences	Essays and multiple choice exams, portfolios, exhibitions, proficiency and standardized tests.
Mathematics	Projects, portfolios, exhibitions, proficiency and standardized tests.
Science	Projects, portfolios, exhibitions, proficiency and standardized tests.
Art	Portfolios, exhibitions, and art history exams.
Foreign Languages	Oral and written examinations, cultural performances and standardized tests.

## Assessment Of Pupil Outcome Goals

Assessments of the pupil outcome goals listed in the section above include the following, in corresponding order:

1. Standardized tests at the State and nationwide level.
2. Writing on demand, essay exams, peer review, portfolios, exhibitions, and oral presentations of reading, and standardized tests.

3. Essays, community surveys, journals, portfolios, and exhibitions.
4. Student report updating a listing of courses taken, a list of those not yet taken, and an schedule/plan for completion.

The subject matter assessments for this outcome goal are as in the table below:

<b>PUPIL OUTCOME GOALS</b>	<b>ASSESSMENT</b>
Proficiency in reading and writing	Varied writing assignments, portfolios, exhibition, proficiency and standardized tests
Mastery of designated goals in English, History, Math, Science, Art, and Foreign Language	Essays, exams, standardized tests, portfolios, exhibitions, lab practical, proficiency test and oral examinations.
Mastery of specific leadership skills designated by school community (e.g. presentation, meting facilitation, conflict resolution, diversity, sensitivity, and knowledge)	Essays, surveys, journals, portfolios, exhibitions, and performance examinations.
Technology and Computer	Portfolios, exhibitions, and projects.

### **Assessment Of School Outcome Goals**

Assessments of the school outcome goals listed in the section above include the following, in corresponding order:

1. Compare ILSA Standardized test scores to state's standardized test scores.
2. Aggregate progress on the individual pupil outcomes, and chart progress over time.
3. Compare ILSA standardized test scores to standardized test scores for comparable schools.
4. Compile annual ILSA attendance records and compare to Indianapolis School Corporation attendance statistics.
5. Compile ILSA dropout records and compare to Indianapolis School Corporation attendance statistics.

ILSA will develop a School Performance Index with the assistance of the school community, other charter schools and research universities. The comparison will include data from progress on leadership and other school standards; standardized tests such as International Baccalaureate, Advance Placement, SAT and ACT results; community service activities; school-to-work initiatives; and other measures of student performance such as competitions, Olympiads and college placements. To the extent possible, this School Performance Index should compare ILSA to schools that have similar student populations (e.g. race, gender, and socioeconomic status).

### **Student Performance Objectives:**

Students will be prepared for college through proficiency of key subjects in a core curriculum, which is defined as mathematics, science, and English.

### **Expectations:**

- 100 percent of students are expected to meet both annual and exit objectives in core subjects, determined in an individual education plan.



**Strategies:**

- Use of quality core curricula in addition to Indiana standards such as University of Michigan's Connected Mathematics Project.
- Special classes after school will offer students additional preparation for the standardized nationwide.

**Progress Indicators:**

- Annual increase in number of students meeting expectations according to standardized tests results and performance based measures.
- The number of students who take the ACT/SATs each year and go to colleges.

**Measurement Tools:**

- Pre and post Iowa tests for all students in addition to Indiana standards.
- Surveys will be sent to graduates who reach college asking them to rate their preparation.

**Family Involvement**

Parental involvement can be categorized into five groups:

- Basic obligations of parents, such as providing for their children's health and safety and creating a home environment that supports learning.
- Basic obligations of schools; such as communicating with parents about school programs and their children's progress.
- Parental involvement at the school site, for example, by attending sports events or student performances or by working as volunteers.
- Parental involvement in learning activities at home.
- Parental involvement in school governance and advocacy.

In ILSA, all five types of family involvement will be addressed wherever appropriate under the program called *Parents as Educators Project*. For example, ILSA will provide meetings, seminars and educational activities for parents in order to assist the obligations in the second type mentioned above.

To develop parental involvement and make it as productive as possible, a variety of strategies will be considered. These strategies can be classified as policy, organizational, personnel, teacher-specific, and parent-specific.

The parents, guardians or mentors of each student attending ILSA will be asked to sign the ILSA Family Contract, which helps incite awareness about the importance of the Family-Student-ILSA triangle for the success of the education.

*Parents as Educators project* will be put into work. The goal of this project is to help parents enhance their children's learning at home. Whenever possible the following techniques will be utilized:

- Ask parents to read to their children regularly or listen to the children read aloud.
- Lend books, workbooks, and other materials to parents.
- Ask parents to take their children to the public library. (Provide the necessary information about how to get there, how to get a library card, and so forth needed.)
- Ask parents to get their children to describe (in detail, daily) what they did in school.

- Give an assignment that requires children to ask their parents questions.
- Ask parents to watch a specific television program with their children and discuss it afterward.
- Suggest ways for parents to include their children in any of their own educationally enriching activities. (These could be as commonplace as shopping for groceries, working on the car, taking care of the house, making minor repairs, working in the yard/garden, tending animals, and so forth.)
- Suggest (and demonstrate in person whenever possible) games or group activities related to the children's schoolwork that can be played by either parent or child or by child and siblings.
- Suggest (and demonstrate) how parents can use home materials and activities to stimulate their children's interest in reading, math and other subjects.
- Establish a formal agreement whereby parents supervise and assist children in completing homework tasks.
- Establish a formal agreement by which parents provide rewards or penalties (or both) based on children's school performance and behavior.
- Ask parents to come and observe the class, not help.
- Give a questionnaire to parents, so that they can provide feedback about their children's progress.
- Explain certain techniques for teaching, making learning materials, or correcting mistakes appropriately.
- Ask parents to sign homework to ensure its completion.
- Ask parents to provide spelling practice, math drills, or other practice.

To avoid assignments being used as useless attachments to current duties, faculty will be assigned to work closely with parents using one-on-one settings and group activities. Working with parents in this way will be the responsibility of each faculty member. The Director and/or school board will supervise these activities.

If concrete actions are taken on the part of school personnel, the school can be a place where parents can expect a warm environment. The following actions will be taken to improve the effective communication and partnerships with parents:

- Publish a clear policy welcoming parental involvement, publicize it, and post it in the school buildings in an obvious place for all to see.
- Teachers will have cell phones, pagers to be accessible all the time.
- Home visit by teachers will be a great tool for parents education and building strong relation between student and teacher.
- Organize the staff, so that at least one person knows each student well- how he or she is doing in all subjects; whether he or she is making friends; whether he or she is anxious, afraid of failing, and so forth.
- Make sure that the school office is friendly and open and that parents are treated with respect and are not kept waiting.
- School's web page will be used effectively for constant communication. Parents will be able to have access to daily homework assignments, grades, attendance via school's secure web page.
- School will assign individual email account to its parents who need it

- Sponsor parent-to-parent events, so that parents can get to know one another and develop common standards for their children's behavior and social life.
- Hire a full-time parent contact person whose job is to help parents understand how they can help their kids learn at home and understand the school structure. The parent contact person should also talk to teachers about parent's concerns and make home visits.
- Set up a parent room in the school building. Equip it with comfortable places to sit, a telephone, books about school age-children and what they need, and access to a copying machine. Some schools have even included a kitchen, a laundry room, sewing machine, computer and typewriter.
- Ensure that parents and school staff work together to determine parents' needs and provide necessary services. Sometimes Parents will need things that do not seem directly related to their children's education, such as help in understanding the immigration laws or in getting their electricity turned back on.
- Provide in-person contact with parents whose primary language is not English, and be sure that translators are involved in all parent-teacher interaction as needed.

Teachers must allow parents to be intimately involved in their children's education. This requires an understanding, on the teacher's part, of what it is like to be a parent. Teachers will hold seminars and meetings to achieve this. This will help involve parents in their child's education, from academics to development of a healthy self-esteem. Strategies to be used include:

- Accept parents as they are and do not try to induce fundamental changes. Trying to change parents in some basic way communicates that something is wrong with them.
- Listen carefully and with empathy for the cognitive and emotional content of the parents' message.
- Help parents feel comfortable and share information and resources when permissible.
- Focus on the parents' hopes, aspirations, concerns, and needs. Attending parents' concerns communicates caring.
- Keep promises.
- Be there when needed even if it creates inconvenience.

At ILSA we believe that involving more parents more often and more productively requires changing the major location of parent involvement from the school to the home, changing the major emphasis from general policies to specific skills, and changing the major target from the general population of students or school staff to the individual child at home. This is why we talk about specific behavior and organizational skills rather than traditional parents' day, or teacher parents' conferences. Traditional participation options will certainly be offered such as volunteer hours for school tasks, teacher meetings and conferences on specific needs of parents.

## **Special Student Populations**

Students who need services under the IDEA or Section 504 of the Rehabilitation Act of 1973 will receive those services in accordance with the IEP (IDEA) or program plan Section 504. Students with special needs will be included in the regular classroom and participate fully in the school's academic and assessment program in accordance with their IEP or Section 504 Plan. The school staff will include a resource room teacher and aides. When necessary, the school will contract with other specialists to provide services needed. In the event that the school is not able to meet the needs of a student, it would seek to contract with another provider in a manner consistent with Federal and State statute to provide these services. In addition, any provisions contained herein are subject to state and federal requirements for students with disabilities.

All core curriculum classes are taught in English Language Arts with in-class support for English as a Second Language (ESL). Native English speakers will learn a second language. This approach recognizes:

- The importance of preparing ESL students for content instruction in English
- The importance of developing literacy and fluency in one's first language so that it may be transferred to one's second language
- The importance of all students learning a second language
- The importance of integrating students of all cultures in a common academic program

Both the first and second language needs of all children will be met with a clear recognition that the ability to perform academically in English is necessary for every child's long-term success. The school will meet these complex sets of needs not by dividing children into fluency or language groups, but by placing all children together in mixed groups and then providing the necessary resources in the classroom to allow all children to excel. Whenever possible, by teaching their first language to ESL students during part of the day, the school will allow them to continue building basic literacy skills that ultimately transfer to their use of English. By including native English speakers in these classes, the School will not only provide them with second language instruction but also create a sense of balance in the school community that recognizes the importance of all the languages and cultures.

## **Organizational Viability and Effectiveness**

### **Budget and Financial Matters**

Estimated three year budget is given in the Appendix 3. School revenues will come from state funding, state grants, federal grants, donations and consumable fees. Bank loans and personal loans may be used if necessary. The revenue and cost estimations are based on the experiences of the founding member's from previous involvement with charter and private schools.

To publicize ILSA, we:

- Put up flyers and posters in public libraries, local banks, real estate companies, department stores
- Presented our school and its mission to families from all sections of the community asking for their feedback by filling out our survey forms (43 so far)
- Set up a homepage for our school ([www.ilsas.org](http://www.ilsas.org)) to reach out to a wider range of people on the Web (our survey can also be filled out there)
- Started talks with local initiatives and companies such as Central Indiana Life Sciences Initiative, Roche, Eli Lilly and Company, Clarian Health Partners, and Guidant Corporation. We already are in touch with Near North Development and they understand the value of Indiana Life Sciences Academy for neighborhood improvement and economic development.

We will:

- Continue to reach out to people through distributing surveys, flyers, brochures, and posters all around Indianapolis metropolitan area
- Hire a PR company to coordinate all publicizing efforts we will make
- Talk to leading local science and technology people for their feedback and support for our initiative

- Hold informational sessions in public libraries and present our goals, mission (using Microsoft's Power Point software. There will be a Questions & Answers period and signup sheets will be available for further inquiries)
- Reach out to churches to have our flyers on their bulletin boards and information about ILSA in their newsletters
- Issue a press release to all branches of the media (TVs, radio stations, local community newspapers) to convey our same goals and mission and also our capacity to achieve such goals.

In the first year, there will be grades 6, 7, 8 and 9 with 50 students in each grade. Starting the following year, one additional 6<sup>th</sup> grade of 50 students will be added ever year. Total number of students will steadily increase reaching 350 in four years. Afterwards, the number of newcomers will match the number of graduates.

ILSA shall be open to all students who are entitled to attend school from the city of Indianapolis. ILSA will not discriminate on the basis of race, color, national origin, creed, sex, ethnicity, sexual orientation, mental or physical disability, age, religion, ancestry, or athletic performance.

A criterion for admission to ILSA is that students and their families be motivated to apply and to sign a Letter of Commitment to promote the mission of the school. However, the school members have the responsibility to promote the school in a way that will instill a desire on the part of families to participate in the school and thus the student's education.

The Admissions Committee in the following steps will conduct the admissions process:

1. **Preparation for admissions process.** Upon receipt of the contract, the Admission Committee will meet to finalize informational documents and application forms;
2. **Information distribution.** Information about the ILSA and the admissions process will be disseminated throughout the Indianapolis City School Districts via flyers, bulletins, media, mailings, and workshops at schools and other public institutions. This process will also include outreach to parents, teachers, pediatricians, counselors, social service agencies, and other youth advocates.
3. **Written applications.** Written applications will be submitted by each interested student and at least one adult (parent/sponsor), which include a birth certificate or other appropriate documentary evidence, court orders or placement papers if applicable including guardianship papers, adoption papers, etc., and proof of residency.
4. **Personal interviews.** All applicant families/sponsors will meet with members of the Admissions Committee to discuss matters crucial to the success of students, let them know the mission and all other aspects of the school.
5. **Letters of commitment.** Each applicant and the ILSA Directors will sign a letter of commitment setting forth their individual pledges of support for the applicant's education. Letters of commitment will be signed before completion of the application process.
6. **Lottery.** In the event that more new students apply than space allows, eligible students will be enrolled by a *lottery* system. All remaining eligible students will be placed on a *waiting list* and accepted as space becomes available. Students who decline to enroll when accepted will be deleted from the list and re-application will be necessary for future consideration. Students already enrolled in the school, and who meet the continuing enrollment standards, will be granted first available space.
7. **Notification.** Students will be notified of their initial enrollment status one-week after the lottery. Students whose names are drawn in the lottery must confirm their intention of

enrolling within the time allotted in their notification of admission, which may be 10 days or less.

8. **Student records.** Students admitted and enrolled to ILSA must notify their previously enrolled school and have their records transferred to ILSA. Students transferring from another school district must submit an official transcript from the sending school in order for the student to receive credit for course work. Report cards will not be considered sufficient evidence for granting credits toward graduation.

## Budget Narrative

### Revenue Assumptions:

*Carry-over from previous period:* The fund balance remaining from the previous year carries over to the beginning of the next year.

*State Per Pupil Funding:* Based on the Indiana Department of Education's school formula estimates for Calendar Year 2003 (made available to the Indiana Charter Resource Center recently) This formula includes State Regular aid, Levy funds, Auto Excise funds, Special Ed, At Risk and Prime Time funds. We assume that at least 80% of our students are resident in Indianapolis Public Schools (average of \$6,700 per student annually), and up to 20% will come from surrounding township schools (average of \$5,700 per student), yielding a blended average of \$6,500 per student. We expect to qualify for some categorical funding from the state and federal departments of education, but have not included those monies in our revenues since they are dependent upon the composition of our student body – which is not yet identified.

According to the Indiana Charter Resource Center, the State of Indiana is committed to raising education funding, in real dollars, at least 1% annually. We conservatively estimate inflation at 2% annually, yielding an average estimated increase in per pupil funding of 3% annually.

*Federal Start-Up Grants:* ILSAS expects to be awarded this competitive grant, which amounts to \$150,000 per year for three years.

*Private Funds:* These sources include planning and special project grants from individuals and foundations. With the help of our board of directors, we will actively solicit for miscellaneous foundation monies, as well as private donations. We estimate to get \$350,000 in private loans for the start-up.

*Lunch Revenue:* This includes both State funds for students with free and reduced lunch classification as well as fees paid by families. We estimate this amount at \$2 per student per day during the school year.

### Enrollment Projections

YEAR	ENROLLMENT
2003-04	200
2004-05	250
2005-06	300
2006-07	350
2007-08	350

**Expenditures:**

Position	Salary (03-04)	Count (03-04)	Count (04-05)	Count (05-06)
Director	\$45,000	1	1	1
Dean Of Student	\$40,000	1	1	1
Dean of Academics	\$40,000	1	1	1
Project Coordinator	\$38,000	1	1	1
Teachers	\$36,000	14	16	18
Computer & Network Administrator	\$36,000	1	1	1
Secretary	\$22,000	1	1	1
Counselor/Special Ed	\$30,000	1	1	2
Maintenance/Custodial	\$16,800	1	1	1
Kitchen Staff	\$16,800	1	1	1
Nurse	\$36,000	1	1	1
Accounting	\$18,000	1	1	1
Security	\$24,000	1	1	1

We assume a 3% annual inflation rate on most items. Note that during the preoperational year positions will be contracted, rather than salaried. Positions will shift to salary at the beginning of the First Operational Year – in July of 2003.

*Payroll Taxes & Benefits:* Calculated at 24% of salaries.

*Professional Development:* Includes \$750 per staff member for conferences or training.

**Facility**

*Rent:* Calculated at \$200,000 per year.

*Utilities:* Calculated at approximately \$33,000 per year.

*Maintenance & Janitorial Supplies:* Estimated at \$8,000 per year for repairs and maintenance, and \$6,000 per year for janitorial supplies.

**Materials/Supplies/Equipment**

*Textbooks and other instructional supplies:* Calculated at \$200 per student for textbooks in the first year and \$20 per student in the following years. Consumable materials are estimated to be \$100 per student per year.

*Field Trips:* Calculated at \$80 per student per year for 4 trips.

*Assessments:* Calculated at \$50 per student per year.

*Instructional Equipment:* Includes TV, VCR, overhead projectors, cassette player and computer hardware and software for classroom. Calculated at \$50 per student per year. Science lab equipment is estimated to be \$50 per student per year.

*Computer and Software:* Includes \$5000 per year for computer lab and \$3000 per year projects and research lab.

*Instructional Software and Internet Access:* Calculated at \$50 per student.

*Library:* Estimated to be \$3,000 per year.

*Classroom, Office and Faculty Furniture:* Calculated at \$12,000 per year following the initial year. Initial cost for the classroom furniture is estimated to be \$69,600.

*Copying and Reproduction:* Estimated \$4,000 per year. Estimated advertisement cost for the start-up period is \$20,000.

*Postage and Shipping:* Estimated \$2,500 per year.

*Telephone/Fax Lines/Long Distance Equipment and Usage:* Estimated at \$5000 for equipment per year and \$6,000 usage per year.

*Equipment maintenance:* Calculated at \$2,000 per year.

*Office Supplies:* Estimated at \$4,000 per year.

### **Additional Costs**

*Contracted Services:* Consulting services with SchoolStart at \$75,000 pre-operating year, \$75,000 first year and \$10,000 subsequent years. Other local consultants such as grant writers may also be contracted.

*Insurance:* Estimate based on charter schools in other states. Includes required liability and other coverage. Estimated cost is \$7,000 per year.

*Marketing Development:* Consulting costs for student recruitment activities and public relations, including cost of producing brochures and materials; estimated at \$20,000 in pre-operation year, and \$5,000 in subsequent years.

*Legal Expenses:* Pre-operation costs include setting up the non-profit status of the school, review and approval of contracts, assistance with business services, review of personnel and other school policies. Ongoing costs include review of policy materials, review of contracts and providing counsel to the Board of Directors. Estimated at \$12,000 pre-operational year and \$5,000 subsequent years.

*Accounting and Audit:* Estimated at \$5,000 for pre-operational year and \$12,000 per operating year for accounting services, and \$8,000 a year for an annual audit to be conducted by a separate contractor for subsequent years.

## **Governance and Management**

ILSA will be governed by a Board of Directors whose ultimate responsibility is to uphold the mission of ILSA by providing for the well being of the institution in the present as well as the future. The Board protects the public interest and upholds the public's trust by applying the highest standards of service in governing the school according to its by-laws, and relevant state and federal statutes. It is the duty of the Board of Directors to make plans, establish policies, and assess the performance of the school as a whole. The Board also bears ultimate responsibility for the school's finances and physical plant. The Board must also identify, select, work with, support and evaluate ILSA Director, who is the professional educational leader of the school. The Board is also responsible to make ready ILSA building before the academic year. In order to undertake successfully all these responsibilities, the Board will organize, manage, and assess itself in an efficient, business-like manner.

### **Board of Directors**

There shall be at least five members of the Board of Directors of ILSA. Board members are nominated and elected on the basis of a firm commitment to the mission, goals and objectives of ILSA, qualities of leadership, service, and expertise in a range of fields such as education, finance, human resources, administration and technology, which they bring to the school. They should unequivocally support the educational philosophy espoused in this document.

No member represents a specific constituency. It is imperative that the Board of Directors makes its decisions for the present and future welfare of ILSA as a whole, rather than in response to personal priorities or the wishes of vocal factions. No Member may speak for the Board on any issue until the Board in its entirety has decided that issue.



The terms of each member shall be at least four years. The organization meeting of the Board of Directors shall occur every month. A quorum of the Board of Directors shall be three members. A majority of the quorum is required to enact business and resolutions. One of the members shall be selected as president, another vice-president and another secretary.

Notice of meetings of the Board of Directors shall be mailed or delivered personally to each member at least 5 business days prior to the holding of such meeting, but shall not be required to state the purpose thereof.

The board shall give full and timely notice to the public of any regular meeting, special meeting, or executive session at which the adoption of any proposed policy or formal action shall occur. Dates of regular meetings of the board shall be provided in annual announcements and made available in printed form to the news media and public. At a minimum, the board shall cause notice of regular and special meetings and work sessions to be posted at the designated public place no less than 24 hours prior to the meeting. This notice shall include the purpose of the meeting and, where possible, specific agenda information.

The Board of Directors may also establish an advisory council, honorary advisory board or such other auxiliary group it deems appropriate to advise and support ILSA, but without establishing memberships or additional directors.

A vacancy on the Board of Directors may be caused by death, resignation, and removal from office or absence from 3 or more consecutive meetings of the Board of Directors. If such absence is caused by reasons declared insufficient by a two-thirds vote of the remaining members of the Board, the Board at its next regular or special meeting shall fill any such vacancy. A majority vote of all the remaining members of the Board may fill any such vacancy.

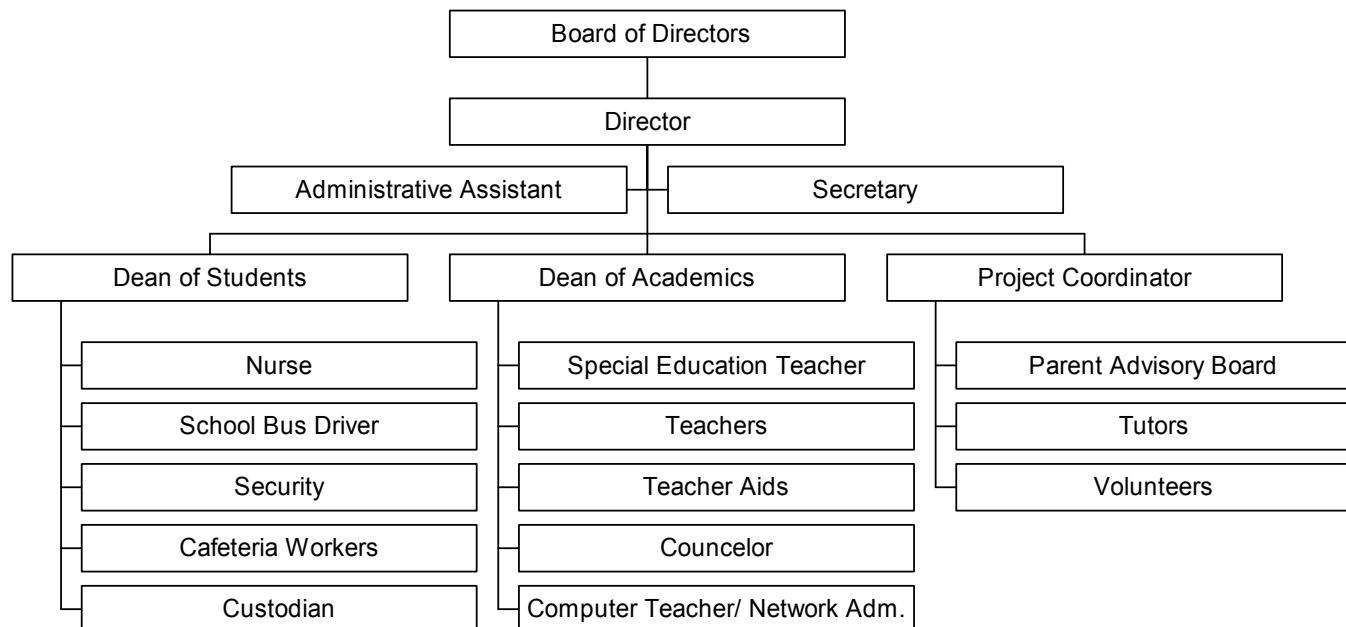
Any individual member may be removed from office by the vote of a majority of the members present at a meeting of the Board of Directors called for the purpose of removing members, if quorum is present. The Board of Directors will be responsible for:

- The general policies of the school.
- Approving and monitoring of the school's annual budget.
- Receipt of funds for the operation of the School in accordance with the charter school laws.
- Solicitation and receipt of grants and donations consistent with the mission of the school.
- Hiring the ILSA' Director.
- Approving the school's personnel policies and monitoring the implementation of these policies by the Director.
- Any other responsibilities provided for in the Articles of Incorporation, Bylaws or this charter necessary to ensure the proper operation of the school.
- Ensuring that the activities of the school are full in alignment with the mission of the school.
- Attending the meetings of the Board of Director's.

At least one Board member and volunteer parents will form subcommittees below. Committees report to full Board for final approval before taking action. Governance policies will be in full compliance with all state and federal regulations.

The Board of Directors will manage the school and all actions taken must be approved by a majority vote of the Board. The Board will rely heavily on the Director to provide the day-to-day leadership necessary to implement the vision of the ILSA. Board members will not engage any business with school other than their responsibilities. They will make sure there is no conflict of interest between school and board members. Structure of the governance is summarized in the chart below:

### Organization Chart for Indiana Life Sciences Academy



### The Sub Committees

1. **ACADEMIC POLICY:** Review curriculum to ensure compliance with the mission of the school; recommend policy change to the Board of Directors where appropriate; and participate in the development of program development and evaluation.
2. **PERSONNEL:** Recommend job description to the Board of Directors; review Head of School recommendations for hiring and firing employees and make recommendations to the Board of Directors; and provide advice on personnel matters to the Board of Directors and the Director of School.
3. **COMMUNITY RELATIONS:** Seek out active involvement of community; act as liaison between Board, staff, parents, volunteers, town, and community to ensure smooth operation of the school; plan social events; and oversee a strong home-school communication program.
4. **FINANCE:** Prepare annual operating and capital budgets for approval by the Board of Directors; review monthly actual revenues and expenditures of the operating, capital, and enterprise activities and present same to the Board of Directors; prepare procedures to be performed by the audit sub-committee and review reports by this sub-committee for approval by the Board of Directors; and provide advice on financial matters to the Board of Directors and the Director of School.
5. **FACILITIES AND EQUIPMENT:** Determine space and equipment needs and costs associated therewith; negotiate lease; ensure compliance with all regulations; develop plans for any necessary renovations to site; monitor ongoing compliance with regulations; and oversee maintenance of building and equipment.

Articles of Incorporation, Bylaws and the verification of non-profit status are given in Appendix 4, 5 and 6 respectively.

## **Transportation**

We believe that charter schools must be open and accessible to all students. Once a facility is identified, Indiana Life Sciences Academy will prepare a detailed transportation plan that ensures that the school will be both open and accessible. The school's transportation plan will be filed with the Indianapolis Charter Schools Board office. The transportation plan will follow the same eligibility guidelines established for regular IPS students, and may consist of private busing, public transportation, and/or coordinated car-pooling.

THREE YEAR OPERATING BUDGET (2003-2005)				
DESCRIPTION	START UP	FY 2003	FY 2004	FY 2005
BEGINNING CASH	\$ -	\$ 39,816	\$ 92,041	\$ 195,479
Number of Students		\$ 200	\$ 250	\$ 300
Per Student Revenue		\$ 6,500	\$ 6,695	\$ 6,896
REVENUES				
Capita Revenues		\$ 1,300,000	\$ 1,673,750	\$ 2,068,755
Grants		\$ 150,000	\$ -	\$ -
Student fees		\$ -	\$ -	\$ -
Donations		\$ -	\$ -	\$ -
Loans	\$ 350,000			
TOTAL REVENUES	\$ 350,000	\$ 1,450,000	\$ 1,673,750	\$ 2,068,755
EXPENSES				
Direct Student Costs				
Classroom supplies	\$ 93,600	\$ 30,000	\$ 37,500	\$ 45,000
Textbooks		\$ 40,000	\$ 3,800	\$ 3,800
Instructional equipment		\$ 6,250	\$ 7,813	\$ 9,375
Science Lab Equipment	\$ 30,970	\$ 6,250	\$ 7,813	\$ 9,375
Field Trip		\$ 4,000	\$ 5,000	\$ 6,000
Computer Lab	\$ 26,740	\$ 5,000	\$ 5,000	\$ 5,000
Projects and Research Lab		\$ 3,000	\$ 3,000	\$ 3,000
Library	\$ 30,180	\$ 3,000	\$ 3,000	\$ 20,000
Food service				
Transportation				
Total Direct Student Costs	\$ 181,490	\$ 97,500	\$ 72,925	\$ 101,550
Personnel				
Director	\$ 11,250	\$ 45,000	\$ 47,250	\$ 49,613
Dean of Student		\$ 40,000	\$ 42,000	\$ 44,100
Dean of Academics		\$ 40,000	\$ 42,000	\$ 44,100
Project Coordinator		\$ 38,000	\$ 39,900	\$ 41,895
Teachers		\$ 504,000	\$ 593,280	\$ 685,238
Computer and Network Adm./ Computer Teacher		\$ 36,000	\$ 37,800	\$ 39,690
Secretary	\$ 6,000	\$ 22,000	\$ 23,100	\$ 24,255
Counselor /Special Education		\$ 15,000	\$ 15,000	\$ 15,000
Maintenance/Custodial		\$ 16,800	\$ 17,640	\$ 18,522
Cafeteria Staff		\$ 8,400	\$ 8,820	\$ 9,261
Staff Development		\$ 13,500	\$ 15,000	\$ 15,000
Nurse		\$ 18,000	\$ 15,000	\$ 15,750
Accounting		\$ -	\$ -	\$ -
Security		\$ -	\$ -	\$ -
Subtotal	\$ 17,250	\$ 796,700	\$ 896,790	\$ 1,002,424
Payroll Taxes /Pension		\$ 199,175	\$ 224,198	\$ 250,606
School for parent		\$ 2,500	\$ 2,500	\$ 2,500
Total Personnel	\$ 17,250	\$ 998,375	\$ 1,123,488	\$ 1,255,530
Occupancy of Facilities				
Rent		\$ 200,000	\$ 200,000	\$ 200,000
Utilities	\$ 6,000	\$ 36,000	\$ 36,000	\$ 36,000
Maintenance		\$ 8,000	\$ 8,000	\$ 8,000
Janitorial Supplies		\$ 6,000	\$ 6,000	\$ 6,000
Total Occupancy	\$ 6,000	\$ 250,000	\$ 250,000	\$ 250,000
Office and Administration				
Supplies		\$ 4,000	\$ 4,000	\$ 4,000
Furniture	\$ 82,250	see start up budge	\$ 12,000	\$ 12,000
Equipment maintenance		\$ 2,000	\$ 2,000	\$ 2,000
Telecommunications eqp.		\$ 5,000	\$ 5,000	\$ 5,000
Telecommunications usage		\$ 6,000	\$ 6,000	\$ 6,000
Accounting/ Audit		\$ 7,000	\$ 7,000	\$ 7,000
Payroll		\$ 2,400	\$ 2,400	\$ 2,400
Printing and copying		\$ 4,000	\$ 4,000	\$ 4,000
Postage and shipping		\$ 2,500	\$ 2,500	\$ 2,500
Total Office	\$ 82,250	\$ 32,900	\$ 44,900	\$ 44,900
Other				
Insurance	\$ 3,194	\$ 7,000	\$ 7,000	\$ 7,000
Building Loan Expense				
Repayment of Loan			\$ 60,000	\$ 120,000
Equipment Loan				
Depreciation Expense				
Replacement Reserve				
Contingencies	\$ 20,000	\$ 12,000	\$ 12,000	\$ 12,000
Total Other	\$ 23,194	\$ 19,000	\$ 79,000	\$ 139,000
TOTAL EXPENSES	\$ 310,184	\$ 1,397,775	\$ 1,570,313	\$ 1,790,980
NET REVENUES	\$ 39,816	\$ 52,225	\$ 103,438	\$ 277,775
ENDING CASH	\$ 39,816	\$ 92,041	\$ 195,479	\$ 473,254
Please see assumptions for growth estimations.				